

INCH-POUND

MIL-PRF-8805/55H

25 June 2003

SUPERSEDING

MIL-PRF-8805/55G

31 October 2001

PERFORMANCE SPECIFICATION SHEET

SWITCH, PUSH, MICROPHONE, DPST, NORMALLY OPEN, FOOT OPERATED,
MOMENTARY, UNSEALED AND WATERTIGHT

This specification forms a part of MIL-PRF-8805, dated 23 January 1998, and is approved for use by all Departments and Agencies of the Department of Defense.

The requirements for acquiring the product described herein shall consist of this specification and MIL-PRF-8805.

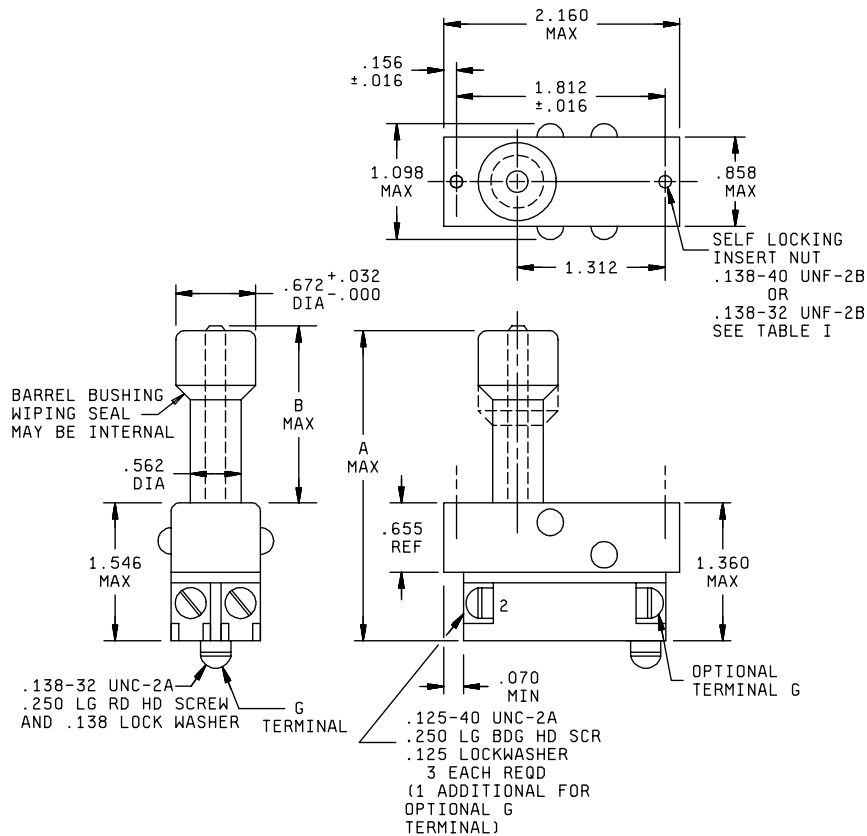
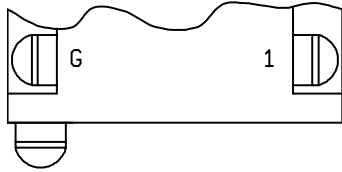
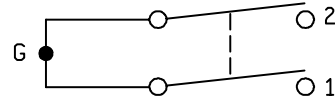


FIGURE 1. Dimensions and configuration.

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TERMINAL MARKINGS



SCHEMATIC DIAGRAM

Inches	mm	Inches	mm
.010	0.25	.858	21.79
.016	0.41	.910	23.11
.032	0.81	1.098	27.89
.070	1.78	1.312	33.32
.125	3.18	1.360	34.54
.138	3.51	1.546	39.27
.156	3.96	1.660	42.16
.250	6.35	1.812	46.02
.562	14.27	2.160	54.86
.655	16.64	2.218	56.34
.672	17.07	2.968	75.39

NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Unless otherwise specified, tolerances are $\pm .010$.
4. Mounting hardware not furnished.
5. Lockwashers are not captive to terminal screws.
6. Dimension A is 2.218 or 2.968, see table I.
7. Dimension B is 0.910 or 1.660, see table I.
8. Design optional within envelope dimensions shown.

FIGURE 1. Dimensions and configuration - Continued.

REQUIREMENTS:

Dimensions and configuration: See figure 1 and table I.

Enclosure design: 1 (unsealed) or 3 (watertight), see table I.

Temperature characteristic: -40°C to +85°C.

Thermal shock: In accordance with test condition A, method 107 of MIL-STD-202, except low temperature extreme shall be -40°C (-40°C to +85°C)

Shock type: 50 g's, sawtooth, in accordance with method 213, test condition G, MIL-STD-202.

Sinusoidal vibration grade: 1 (10 to 500 Hz).

Material:

Mounting bracket: Steel, corrosion resistant or equivalent.

Weight:

With short actuator bushing (M8805/55-001, -003, -005, and -007): 0.25 pound maximum.

With long actuator bushing (M8805/55-002, -004, -006, and -008): 0.32 pound maximum.

Operating characteristics:

±10% variation from specified values acceptable after test.

Actuating force: 7.0 (+4 -0) pounds

Pretravel: .090 inch minimum.

Total travel: .165 inch minimum.

Overtravel: .050 inch minimum.

Differential travel: .050 inch minimum.

Full overtravel force: 20 pounds maximum.

Release force: 0.5 pounds minimum.

Rated load at 28 V dc: 0.75 ampere inductive at sea level only.

Overload at 28 V dc:

Inductive: 1.75 amperes

Minimum operating cycles:

Rated load: 50,000 cycles

Overload: 1,000 cycles.

Dielectric withstanding voltage:

Altitude: 50,000 feet.

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Terminal strength:

Pull: 20 pounds.

Torque: 5 inch pounds.

Strength of actuating means: 20 pounds.

Moisture resistance: Insulation resistance shall be not less than 2.5 megohms in the wet condition, and not less than 50 megohms in the dry condition.

Salt spray (corrosion):

Unsealed switches (M8805/55-001 through -004): Group III of the MIL-PRF-8805 qualification inspection table is applicable, except no electrical test applicable following salt spray.

Sand and dust: Method I.

Solderability: Not applicable.

Mechanical endurance: 50,000 cycles.

Qualification inspection: See table II.

Part or Identifying Number (PIN): See table I.

TABLE I. PIN's, configurations and dimensions.

Part or Identifying Number PIN <u>1</u> /	Seal	Actuator bushing	Dimensions		Insert nut thread
			A	B	
M8805/55-001	Unsealed	Short	2.218	0.910	.138-40 UNF-2B
M8805/55-002		Long	2.968	1.660	
M8805/55-003		Short	2.218	0.910	.138-32 UNF-2B
M8805/55-004		Long	2.968	1.660	
M8805/55-005	Watertight	Short	2.218	0.910	.138-40 UNF-2B
M8805/55-006		Long	2.968	1.660	
M8805/55-007		Short	2.218	0.910	.138-32 UNF-2B
M8805/55-008		Long	2.968	1.660	

1/ M8805/55-001 replaces and is interchangeable with canceled PIN MS25039-1.

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TABLE II. Qualification inspection group submission.

Examination or test <u>1/</u> <u>2/</u>	Basic switch	Other switch samples <u>1/</u>	Extent of approval
Groups I, II, III, VI, VII, and VIII	M8805/55-005	M8805/55-008 Group I	ALL
Groups I, II, III, and V	M8805/55-001		

1/ Group numbers refer to those inspection groups specified in the MIL-PRF-8805 qualification inspection table.

2/ If only the sealed versions, or only the unsealed versions are being qualified, the entire qualification inspection table of MIL-PRF-8805 is applicable.

Custodians:

Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5930-1772)

Review activities:

Army - AR, AV, MI
Navy - AS, MC, OS, SH
Air Force - 19, 99